

ABSTRACT OF THE DISCLOSURE

The invention further reduces a size and cost of a reactor for generating water from oxygen and hydrogen, provides high-purity water in an amount necessary for practical use safely, stably and continuously, and allows a platinum-coated catalyst layer formed on an inner wall of a reactor body to maintain high catalytic activity over a long period of time. Specifically, the reactor comprises a body made of a heat-resistant material and having an inlet and an outlet for water/moisture gas, has a gas-diffusing member provided in an internal space of the body, and has a platinum coating on an internal wall surface of the body. Hydrogen and oxygen fed from the inlet is diffused by the gas-diffusing member and then comes into contact with the platinum coating to enhance reactivity, thereby producing water from hydrogen and oxygen. A temperature of the reactor for generating moisture, wherein hydrogen is reacted with oxygen at a high temperature to generate moisture, is held to be below an ignition temperature of hydrogen or a hydrogen-containing gas so that hydrogen is reacted with oxygen while preventing explosive combustion of hydrogen and oxygen. The platinum-coated catalyst layer on the internal wall of the reactor body is formed by treating the surface of the internal wall of the body, cleaning the treated surface, forming a barrier coating of a nonmetallic material of an oxide or nitride on the wall surface, and forming the platinum coating on the barrier coating.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Divisional Application of:)
Tadahiro OHMI et al.) Atty. Docket: SUGI0069
Serial No. _____ (corresponding to)
U. S. Patent Application Serial No.)
09/117,350 filed July 28, 1998))
Filed: Herewith)
For: METHOD FOR GENERATING)
MOISTURE, REACTOR FOR)
GENERATING MOISTURE,)
METHOD FOR CONTROLLING)
TEMPERATURE OF REACTOR)
FOR GENERATING MOISTURE,) Date: February 15, 2001
etc.)

SUBMISSION OF NEW SHEETS OF FORMAL DRAWINGS

BOX: PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D. C. 20231

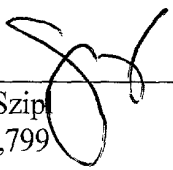
Sir:

Kindly substitute the attached new sheets of formal drawings containing Figs. 1-53 for
the drawings annexed to the divisional application being filed concurrently herewith. The

attached new sheets of drawings make the changes mentioned in the Preliminary Amendment
filed with the divisional application.

Respectfully submitted,

GRIFFIN & SZIPL, PC



Joerg-Uwe Szips
Reg. No. 31,799

GRIFFIN & SZIPL, PC
Suite PH-1
2300 Ninth Street, South
Arlington, VA 22204

Telephone: (703) 979-5700
Facsimile: (703) 979-7429
Customer No.: 24203